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Understanding the Syrian Educational System in a Context of Crisis

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UNDERSTANDING THE SYRIAN EDUCATIONAL SYSTEM IN A CONTEXT OF CRISIS?

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Abstract

Up until the outbreak of conflict in 2011, Syrian young people were among the most educated in the Middle East region, with Syria having achieved near universal primary education enrolment and a high rate of completed secondary education. Due to the years of conflict, many Syrian are currently displaced within their country and across Syria's borders. In 2015, large numbers made their way across Europe and applied for asylum in Germany, Austria, Sweden, etc. The Syrian crisis raises important education-related questions for the international community as a whole, like the educational background of Syrians currently on the move. This paper gives an overview of the Syrian educational system in order to build an understanding of Syrian education in the broader global context. It aims to provide detailed information that other researchers, policymakers, and practitioners can draw from to inform their own work. The current document was written within the framework of DiPAS (Displaced persons in Austria survey), a survey carried out in and around Vienna to study the socio-demographic characteristics, values and attitudes of asylum seekers arriving in Austria in 2015.

Keywords

Syria, education, educational system, crises.

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Understanding the Syrian Educational System in a Context of Crisis

Mohammed Al Hessian

in collaboration with Stephanie Bengtsson and Judith Kohlenberger

1. Introduction

Up until the outbreak of conflict in 2011, Syrian young people were among the most educated in the Middle East region, with Syria having achieved near universal primary education enrolment and a secondary school completion rate of 74 percent (Bouchane, 2016). In fact, Syria has a long history of learning and education, being home to the first known alphabets and one of the oldest recorded languages still used today, namely Aramaic. Unfortunately, the economic and social collapse brought on by years of conflict has undone years of educational achievement, with over 2 million Syrian children out of school (inside and outside Syria), still others at risk of dropping out, and one fifth of all Syrian teaching staff and school counsellors lost (UNICEF MENA, 2015). Further, one out of every five schools in Syria has been damaged, destroyed, or repurposed, often as army barracks (ibid.).

The protracted Syrian crisis has precipitated mass displacement, both within and across Syria's borders, which has had (and continues to have) an enormous impact on wellbeing, prosperity, and stability in the region as a whole, for displaced persons and their host communities alike. Further, while most Syrian refugees have remained in the region (in Lebanon, Jordan, Turkey, Egypt, and Iraq), an increasing number have been making their way across Europe, to Greece, Italy, Austria, Germany, France, etc. The Syrian crisis raises some important education-related questions for the international community as a whole, for example: (1) What is the educational background of Syrians currently on the move? (2) How can an understanding of this educational background better inform the realisation of one of the three durable solutions for displaced populations (voluntary repatriation, local integration, or resettlement) (UNHCR, 2001-2016)? (3) How can a better understanding of the Syrian education system help to ensure that the devastating impact the conflict has had on it is halted and reversed?

While it is beyond the scope of this document to attempt to answer these questions, the document aims to give a detailed overview of Syrian education that other researchers, policymakers, and practitioners can draw from to inform their own work. The purpose of this document is therefore twofold:

- (1) To provide readers with an overview of the Syrian educational system

(2) To build an understanding of Syrian education in the broader global context

This paper is based on a review of both scholarly and grey literature (including UN agency documents and Syrian government websites) and is supplemented with one author's own personal knowledge (as a Syrian) and communications with other Syrians. Unfortunately, some of the links to webpages of the Ministry of Education used in this paper no longer work (they are referred as MoE, nd). The current document was written within the framework of DiPAS (Displaced persons in Austria survey), a survey carried out in and around Vienna to study the socio-demographic characteristics, values and attitudes of asylum seekers arriving in Austria in 2015 (Buber et al. 2016). The author Mohammed Al Hessian was an intern between March and May 2016 in a program called "ÖAW Flüchtlingsinitiative" ["ÖAW Refugee Initiative"] at the Vienna Institute of Demography (VID) of the Austrian Academy of Sciences. The internship was financed by the Austrian Academy of Sciences.

This document opens with a brief background, followed by a discussion of financing, administration and management of education in Syria. It then presents the structure of the Syrian education system, describing early childhood care and education, basic education, secondary education, post-secondary education, and religious education before concluding with a discussion of the Syrian education system in current times of crisis.

2. Background

The modern state of Syria¹ was established as a French mandate in 1920, and then gained independence in 1945, when it became a founding member of the United Nations (UN). Thereafter, the country faced numerous political changes and military coups until 1963, when the Ba'ath party took over the country through a coup d'état. The Ba'ath party has been in power since then, and the country was under Emergency Law between 1963 and 2011. In March 2011, a largely peaceful protest movement started as part of the Arab Spring, though violent conflict soon broke out between government forces, protesters, and other parties. The conflict has essentially divided Syria into four regions, controlled by different interest groups: (1) the Syrian government forces and allies, (2) the Syrian opposition and Syrian Islamic factions, (3) Kurdish forces of the People's Protection Units (YPG) and (4) the so-called Islamic State in Iraq and the Levant (ISIL).² Further it has led to the displacement

¹ Today, it is officially the Syrian Arab Republic.

² The name ISIL is generally used by officials from the United Nations (UN) to describe the extremist organisation that controls significant areas in Syria and neighbouring Iraq. The group is also sometimes referred to as ISIS – Islamic State in Iraq and Syria, or Islamic State in Iraq and al-Sham – or Daesh/Da'ish, an Arabic acronym, which is used by some to challenge the group's legitimacy. The group tends to refer to itself by the shortened name Islamic State (IS).

of millions of Syrians within and outside Syria’s borders. Table 1 below provides some key recent demographic information about Syria:³

Table 1: Key demographic information about Syria

Population	17,185,170 (July 2016 est.)
Ethnic Groups	Arab (90%), Kurds, Armenians, and other (10%)
Religions	Muslim (87%, majority Sunni), Christian (10%), Druze (3%), some Jewish
Median Age	24.1 years (2016 est.)
Refugees in Syria	526,744 Palestinian refugees (2014), undetermined number Iraqi (2015)
Syrian Refugees	4.8 million dispersed in Egypt, Iraq, Jordan, Lebanon, and Turkey (2016)
IDPs (Internally displaced persons)	6,563,462 (2015)

Source: CIA (2016)

As can be seen from Table 2, Syria has a relatively young population. In fact, according to data from the UNESCO Institute of Statistics (UIS), approximately half of the Syrian population is of school-going age (between pre-primary and tertiary level) as demonstrated in Table 2:

Table 2: School-age population by education level

Education level	Age group	Number of people
Pre-primary	3-5	1,443,016
Primary	6-9	1,885,406
Secondary	10-17	3,627,384
Tertiary	18-22	1,805,523
<i>TOTAL</i>	3-22	8,731,329

Source: UIS (2016)

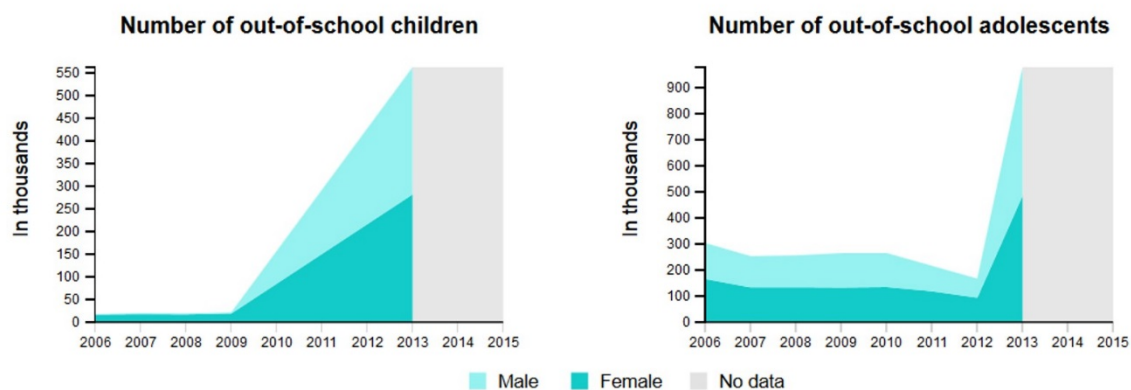
As mentioned in the introduction, prior to the conflict, Syria had made vast gains in terms of education, such that Syrian youth are now amongst the highest-educated in the region. In 2015, the literacy rate (defined as those aged 15 and over who can read and write) among Syrians was still relatively high in comparison with the region as a whole at 86.4 percent (males: 91.7 percent; females: 81 percent) (CIA, 2016). Yet, as Figure 1 from UIS (2016) demonstrates, the conflict has had a devastating impact on school attendance and retention rates.

In other words, unless a concerted global effort is made to address the education needs of Syrians (both in Syria and on the move), Syria faces the prospect of a ‘lost generation’ in terms of education (UNICEF, n.d.).

³ Note: Given the challenges with collecting data in conflict-affected contexts and the dramatic demographic changes occurring as a result of the conflict, this information may not necessarily be reflective of the current situation in the country.

Figure 1: Number of out-of-school children in Syria (2006-2015)

Participation in education



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Out-of-school children										
Total	17,803	20,097	19,400	21,678	...	...	...	562,763	...	...
Female	16,425	17,477	16,974	19,289	...	...	...	282,256	...	...
Male	1,378	2,619	2,427	2,389	...	...	...	280,507	...	...
Out-of-school adolescents										
Total	304,321	253,624	256,293	265,254	265,852	216,765	167,537	979,378	...	...
Female	166,180	133,836	134,295	132,770	135,104	118,935	93,928	486,489	...	...
Male	138,141	119,788	121,998	132,484	130,748	97,830	73,609	492,889	...	...

Source: UIS (2016)

3. Financing, Administration and Management of the Educational System

According to the most recently available data (from 2009), Syria allocated 5.1 percent of its gross domestic product (GDP) to education (WES, 2016). While no data on spending are readily available from after the outbreak of the conflict in 2011, it is likely that less money is available for education from the government (either because education spending is often deprioritised in crisis contexts, or because the GDP is lower, or both). The formal education system is predominantly public: 97% of basic education schools (primary and lower secondary) and 94% of upper secondary schools are public, the rest are private (WES, 2016). In 2001, Syria's government authorised the privatisation of the higher education sector, and now there are 20 private and 7 public universities.

In Syria, four ministries are primarily responsible for the administration and management of the educational system (though others, including the Ministry of Agriculture and the Ministry of Religious Endowments, do have a role to play):

- (1) The Ministry of Education (MoE)
- (2) The Ministry of High Education (MoHE)
- (3) The Ministry of Culture (MoC)
- (4) The Ministry of Social Affairs and Labour (MoSAL)

The two former ministries are the most important in terms of the formal Syrian education system.

The MoE is responsible for all pre-tertiary education (with the exception of agricultural secondary schools, which fall under the remit of the Ministry of Agriculture), meaning that it defines educational policy, and the general plans of the state, and is meant to ensure that educational plans are translated into reality (UNESCO, 2011). Like many other nations around the world, Syria has introduced a number of decentralisation policies. As such, some authority has been delegated to Directorates of Education (مديريات التعليم) in different Syrian governorates, who are able to apply compulsory education plans, provide health care through the schools, implement training activities, and license the opening private primary and intermediate schools, early childhood education centres, and evening classes (ibid.). According to WES (2016), teacher training is an MoE priority, who provide continuing professional development for teachers on an ongoing basis. The local Directorates use classroom observations to monitor teacher performance, and provide access to guidance from education specialists (ibid.).

The MoHE has responsibility for universities, as well as some two-year technical institutes (known as 'intermediate' institutions) and tertiary education institutions, and centres for post-graduate studies. Planning and definition of higher education (HE) is a centralised process, while implementation is decentralised. The Council of Higher Education coordinates activities, and supervises all intermediate institutes.

The MoC (in collaboration with other organisations) coordinates and facilitates a number of key literacy activities, while the MoSAL is responsible for the supervision of day care centres and centres working with people with disabilities (UNESCO, 2011).

4. Structure of the Syrian Education System

4.1 Overview

The Syrian education system shares many similarities with other countries around the world. Early childhood education (pre-primary) is available for children aged 3 to 5, but is not compulsory and is provided on a fee-paying basis (WES, 2016). Syria has a 12 year basic and secondary education system (9 years of basic education, which is mandatory, and 3 years of secondary education, which is offered at general secondary schools or

technical/vocational schools) (Figure A1). The academic year runs from September to June and the primary language of instruction is Arabic.

Syria also has a well-developed post-secondary education system, which consists of over 200 technical/intermediate institutes, 27 universities (7 public and 20 private), and 6 higher institutes, which are public institutions supervised by the MoHE with higher entry requirements than for public universities, offering diplomas and degrees up to doctorate level (WES, 2016).

Up until 2003, military education was taught to all students (both boys and girls) at lower and upper secondary levels. Curriculum included military lessons and political education, following Ba'ath party theories. All pupils were required to wear military uniform, including black shoes, black socks, and military caps. Further, military education teachers had additional duties within the school system, which included maintaining order and discipline among students.

Finally, in Syria, religious education (Islamic education for Muslim students; Christian education for Christian students) is compulsory from Grade 1 until the end of the upper secondary education. The religious curriculum is supervised by the MoE in coordination with the Ministry of Religious Endowments. In addition to regular schools for basic and secondary education (which offer religious education as part of their curriculum), there are also Sharia schools, Christian schools, and a very small number of Jewish schools.

4.2 Early Childhood Care and Education

Early Childhood Care and Education (ECCE) is not compulsory in Syria and is provided on a fee-paying basis (WES, 2016). Most pre-primary/ECCE Centres for children aged between 3 and 5 are privately owned and run, though some are run by syndicates, unions, women's federations, local community centres, etc. The government has attempted to encourage grassroots organisations to establish more ECCE opportunities (ibid.). According to the World Bank (2015), in 2009, only 17 percent of 3 to 5 year olds were enrolled in ECCE, and only 55 percent had experienced any form of childhood development activities.

4.3 Basic Education (Primary and Lower Secondary)

4.3.1 Overview

Prior to 2002, Syria's formal (pre-tertiary) education system was divided into three levels: (1) primary education, which lasted 6 years and was compulsory, (2) intermediate education, which lasted 3 years, and (3) secondary education, which lasted 3 years (MoE, n.d.). In 2002 the first two levels (primary and intermediate) were combined into basic

education. Basic education in Syria is divided into two cycles: first cycle (Grades 1 through 4) and second cycle (Grades 5 through 9). It is compulsory and free. The official age of entry for Grade 1 in Syria is 6.

97 percent of all basic education schools in Syria are public; the remaining 3 percent are private (WES, 2016). Basic education (both public and private) is supervised by the Syrian MoE, who makes decisions about curriculum and textbooks, teaching staff, academic year plans, as well as the dates of national examinations, etc. (MoE, n.d.).

The academic year runs from September to June, and consists of two semesters: Semester One lasts from September to December; Semester Two lasts from December to June. The total study days range from 167 to 170 days (33 to 34 study weeks). Typically, there are 25 to 35 children in each basic education class. Basic education schools are co-ed (i.e. host both girls and boys) up until the end of the first cycle.

4.3.2 Teachers

A 4-year bachelor's degree, which addresses pedagogy, subject specialisation, and practical training, is required for those wishing to teach at basic education level in Syria (WES, 2016). Alternatively, individuals who hold a bachelor's degree in another field can complete a 1-year programme leading to a Qualifying Diploma in Education certificate (ibid.).

4.3.3 Curriculum

The basic education curriculum is set by the MoE and includes the subjects listed in Table 3. The language of instruction at basic education schools is Arabic. In addition, English, French or Russian are taught as foreign languages. English language is the primary foreign language taught in schools. Up until 2005, English was first introduced in the 5th grade onwards. In 2005, it was introduced from the 1st grade. Russian language has been introduced as a second foreign language since 2014.

Table 3: Timetable with number of weekly lessons in basic education, academic year 2015/16

Subject	Grade								
	First cycle				Second cycle				
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th
Religious education	1	1	2	2	2	2	2	2	2
Arabic language	10	9	8	8	7	7	6	6	6
English	2	3	3	3	3	3	3	3	3
French*	-	-	-	-	-	-	2	2	-
Russian* (since 2014)	-	-	-	-	-	-	2	2	-
Mathematics	4	4	4	4	4	4	4	4	5
Social studies	1	1	2	2	3	3	4	4	4
Science and health education	3	3	3	3	3	3	3	4	4
Music education	2	2	1	1	1	1	1	1	1
Art education	2	2	2	2	2	2	1	1	1
Physical education	2	2	2	2	2	2	2	2	1
Informatics	-	-	-	-	-	-	2	1	-
Sub-total	27	27	27	27	27	27	30	30	30
Physical and science activities	2	2	1	1	-	-	-	-	-
Professional education	-	-	-	-	2	2	2	2	2
Informatics	-	-	-	-	-	-	-	1	-
Scout activities	2	2	2	2	2	2	-	-	-
Total weekly lessons	31	31	30	30	31	31	32	33	32

Source: Syrian Ministry of Education: <http://moed.gov.sy/moefiles/docs-2016/pdf/plan-2016.pdf>

* In grade 7, students choose between French or Russian to fulfil foreign language requirements (in addition to English)

4.3.4 Assessment

Student assessment for Cycle One (Grades 1 through 4) of basic education operates on a 10 point scale (0-4 is considered weak; 5-7, medium; 8, good; 9, very good; 10, excellent) (WES, 2016).

Student assessment for Cycle Two (Grades 5 through 9) of basic education operates on a percentage system, where 70-100 percent is considered excellent, 60-69 percent is considered good, and 40-59 percent is a passing grade⁴ (WES, 2016).

At the end of the second basic education cycle, students sit national exams. Those who pass are awarded Shahadet Al-Taleem Al-Asasi (Basic Education Certificate) (WES, 2016). The final exams include seven subjects: Arabic language, mathematics, “general science” (chemistry, physics and biology), religious education (Islamic education or Christian education), English language, French language, and social studies (history, geography and

⁴ The passing grade for Arabic is higher at 50%.

political education). Pupils must pass at least five of these seven subjects (including Arabic, which has to be passed) in order to complete basic education and be awarded a certificate. Those who do not pass at least five of the seven subjects will have to repeat the 9th grade. If Arabic language is not passed, the 9th grade must be repeated, even if the other subjects have been passed successfully. Starting in the summer of 2016, a new assessment and passing system applies for the national exams: Students who failed up to four subjects have to attend additional courses (called “supplementary semester”) lasting two months and held during the summer period where they receive supportive lessons in the failed subjects. After these two months, students can repeat exams in their failed subjects.

Students’ performance on the exams will determine if they attend general secondary school or vocational/technical secondary school. The following thresholds apply:

- 50% is the minimum average to be admitted to General Secondary School
- 33% to 50% is the average to be admitted to Vocational/Technical Secondary School
- 33% is the minimum rate for success

4.4 Secondary Education (Upper Secondary)

4.4.1 Overview

Secondary (technically, upper secondary) education in Syria lasts three years (Grades 10 through 12) and is offered at general secondary schools and technical/vocational schools. It is not compulsory. All students who graduated from basic education with a Basic Education Certificate are eligible to enrol in secondary education, though their test results determine whether they attend a general or a technical/vocational school, as previously discussed. The typical age of students enrolled in secondary education is 15 to 18.

94 percent of all upper secondary schools in Syria are public; the remaining 6 percent are private (WES, 2016). Upper secondary education (both public and private) is supervised by the Syrian MoE, who makes decisions about curriculum and textbooks, teaching staff, academic year plans, as well as the dates of national examinations, etc. (MoE, n.d.). When it comes to vocational secondary education, eleven ministries participate in its provision.

4.4.2 Teachers

A 4-year bachelor’s degree, which addresses pedagogy, subject specialisation, and practical training, is required for those wishing to teach at secondary education level in Syria (WES, 2016). Alternatively, individuals who hold a bachelor’s degree in another field can complete a 1-year programme leading to a Qualifying Diploma in Education certificate (ibid.).

4.4.3 Curriculum

4.4.3.1 General Secondary Education

Prior to the 2014/15 academic year, the first year of general secondary education (10th grade) was a common introductory year, after which students choose a subject cluster in either literary or sciences with different numbers of lessons in various subjects (Table 4).

Since the 2015/16 academic year, the first year of general secondary education is no longer the same for all students, but divided into the two branches from the start (Table 5).

Table 4: Timetable of secondary education with number of weekly lessons in the two academic branches (science and literary), valid until the academic year 2014/2015

	Grades				
	10 th	11 th		12 th	
Branches	Both	Science	Literature	Science	Literature
Subject					
Religious education	2	2	2	2	2
Arabic	5	4	7	4	8
English	3	3	4	4	5
French	2	2	3	4	5
Philosophy and human sciences	1	2	3	-	5
History	2	1	3	-	3
Geography	2	-	3	-	3
Mathematics, statistics	4	5	1	8	-
Science education	-	-	1	-	-
Informatics	2	2	2	-	-
Physics	2	4	-	5	-
Chemistry	2	2	-	2	-
Biology	2	3	-	3	-
Arts	1	-	1	-	-
Physical education	1	1	1	-	1
Political education	1	1	1	1	1
Total	32	32	32	33	33

Source: Syrian Ministry of Education (<http://moed.gov.sy/site> <http://moed.gov.sy/moefiles/docs-2016/pdf/plan-2016.pdf>, (pages 10-12).

Table 5: Timetable of secondary education with number of weekly lessons in the academic branch (science and literary branches), valid since the academic year 2015/16.

	Grades					
	10 th		11 th		12 th	
Branches	Science	Literature	Science	Literature	Science	Literature
Subject						
Religious education	2	2	2	2	2	2
Arabic	5	5	4	7	4	8
English	3	3	3	4	4	5
French	2	2	2	3	4	5
Philosophy and human sciences	1	2	2	4	-	5
History	1	2	-	3	-	3
Geography	1	2	-	3	-	3
Mathematics, statistics	5	4	6	1	8	-
Informatics	1	1	2	2	-	-
Physics	3	2	4	-	5	-
Chemistry	2	2	2	-	2	-
Biology	3	2	3	-	3	-
Arts	1	1	-	1	-	-
Physical education	1	1	1	1	-	1
Political education	1	1	1	1	1	1
Total	32	32	32	32	33	33

Source: Syrian Ministry of Education (<http://moed.gov.sy/site> <http://moed.gov.sy/moefiles/docs-2016/pdf/plan-2016.pdf>, (pages 10-12).

4.4.3.2 Vocational/Technical Secondary Education

Vocational Secondary Education (VSE) is provided by technical schools and is further divided into a number of specializations such as industry, trade and agriculture (Table 6).

Table 6: Different fields of vocational secondary education

Vocational Field	Vocational Specialization
Industrial	Heating and extensions Models and plumbing Joinery and decoration Medical equipment maintenance Electrical techniques Vehicles mechanic Welding and metal forming Garment manufacturing Cooling air and conditioning Mechanical manufacturing
Trade	Commerce and business
Agricultural	Veterinary Agriculture
Nursing	Nursing
Household economics and arts for females*	Haircutting and beauty Sewing and dressmaking (only available for women)
Computing	IT
Tourism	Tourism and hotels
Telecommunications	Telecommunications

Source: <http://moed.gov.sy/ecurricula/>

*Female: only available for women

4.4.4 Assessment

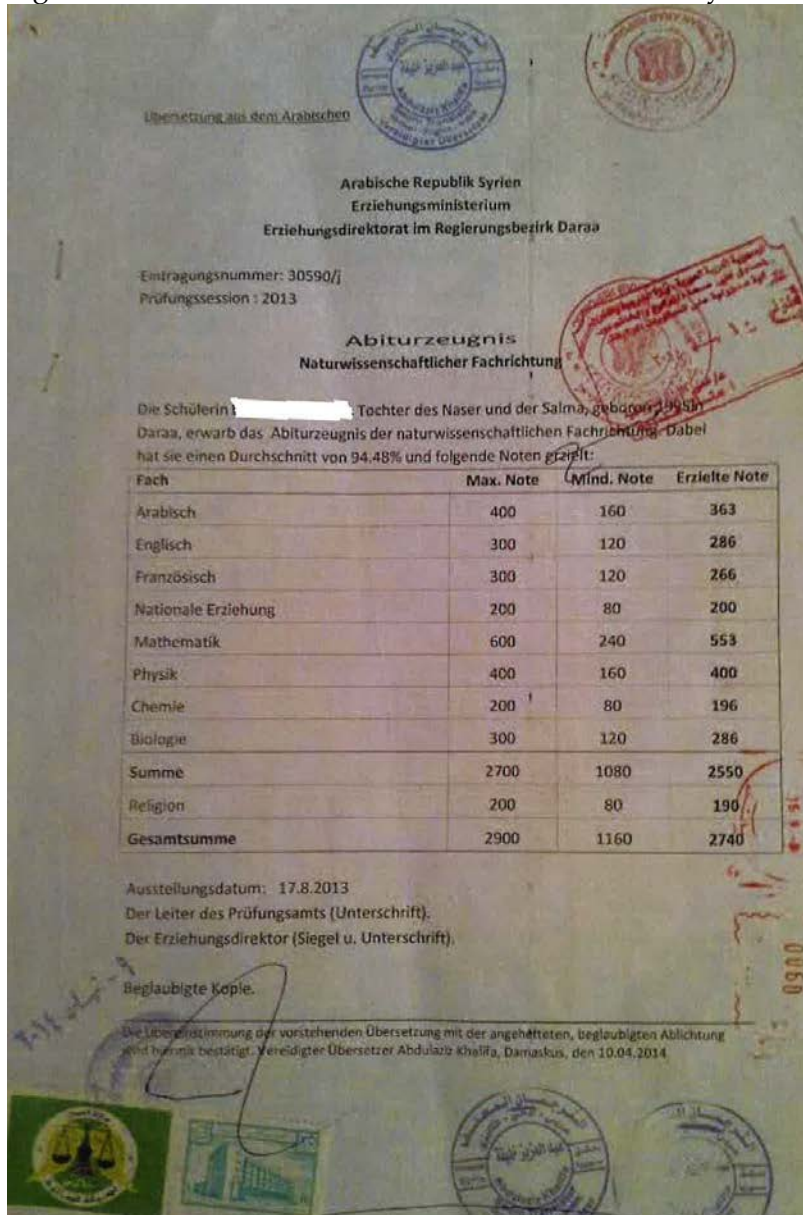
4.4.4.1 General Secondary Education

Student assessment for secondary education operates on a percentage system, where 70-100 percent is considered excellent, 60-69 percent is considered good, and 40-59 percent is a passing grade⁵ (WES, 2016) (see Figure 2 for illustration). Students have to pass all courses to progress to the next grade level.

This phase of education concludes with a central national exam leading to the General Secondary Certificate (GSC). In principle, those who complete it successfully (and are awarded their GSC) are admitted to universities and other tertiary education institutions.

⁵ The passing grade for Arabic is higher at 50%.

Figure 2: German translated scan of General Secondary Certificate (GSC) (science track)



Source: Certificate provided via personal contacts.

4.4.4.2 Vocational Secondary Education

While there is no readily available information on how VSE is assessed, these programs of study conclude with exams and the award of a Technical Vocational Secondary Education Certificate. Diplomas have different names depending on the subject area, for example, “Industrial Secondary School Diploma”, “Secondary School of Commerce Diploma” or “Secondary School of Agriculture Diploma”. It should be noted that universities accept very few pupils from VSE, even if they do well on their exams. In other words, it is very difficult to re-enter an academic stream once a student has enrolled in vocational school.

4.5 Post-Secondary Education

4.5.1 Overview

As previously mentioned, Syria has a reasonably well-developed post-secondary education sector. The MoHE oversees Syrian higher education. Tertiary education is provided in intermediate institutes, universities, higher institutes, educational hospitals, and educational and council centres, such as the “Arabic language Complex” or “Information Technology Centre” (Table 7).

Table 7: Post-secondary education system

Level	Degree	Institution type	Duration	Requirement
Stage I	Diploma	Vocational/Technical Institutes	2 years	Minimum 50% or 60%
	Bachelor's degree	Universities	4-6 years	Minimum 50% or 60% Project/research/training/internship
Stage II	Higher Diploma	Universities	1-3 years	Minimum 60% Project/research
	Master's degree	Universities	2 years (minimum)	Minimum 60% Thesis
Stage III	Doctoral degree	Universities	2 years (minimum)	Minimum 60% Thesis

Source: <http://www.mohe.gov.sy/mohe/>

Most post-secondary education is state-provided, but legislation in 2001 allowed the establishment of some private universities and colleges, though all higher education institutions cannot operate without government approval (in terms of formal recognition and accreditation) (WES, 2016). While public universities are ‘free’ (though some charge symbolic fees⁶), fees for studying in private institutions range between 50,000 SYP and 250,000 SYP.⁷ Some institutions provide accommodation and transportation for students.

The main body responsible for overall policy concerning teaching and scientific research is the Council for Higher Education, which consists of representatives of universities, teachers, students, and the Ministries of Education, Health, Planning and Higher Education. The council coordinates higher education, teaching programmes and their relation to social and economic plans, and takes decisions concerning equivalence of university degrees.

There are no age limitations for entering tertiary education, only limitations based on performance at secondary level. The academic year lasts from October to June. The

⁶ In pre-war times, this symbolic fee was about 500 SYP = 10 \$ per year. In case of poor students, the National Union of Students pays this fee.

⁷ Per capita income per year amounted to 3 000 US\$ in Syria in 2010 (UN 2016). With the exchange rate in pre-war times of 46.5 SYP for 1 US \$, per capita income per year was about 140,000 SYP in 2010.

language of instruction is primarily Arabic (though some higher education programmes are in English and French) (WES, 2016).

A master's degree or PhD is required for those wishing to teach at the university level.

Regarding occupational fields, there are some fields that are available to females only and others to males only:

Female Fields:

- Technical Institute of Domestic Economy: (two academic years, Post-Secondary Non-Tertiary) only eligible for girls who have Female VSE certificate. There is only one institute that accommodates between 500-600 girl students.
- Nursing: Trained midwife; two academic years; post-secondary non-tertiary level
- Technical Institute of Dentistry: Dental assistants; two academic years; post-secondary non-tertiary level
- College of Education: Department of child-rearing; four academic years; university level studies

Male Fields:

- Technical institute of oil and gas: two academic years; post-secondary non-tertiary level
- Technical institute of railways: two academic years; post-secondary non-tertiary level

It is also important to consider how the social, economic, and political context influences study preferences. For example, women who have scored high on the GSC (Science Branch) tend to apply to study pharmacy, while women who have scored high on the GSC (Literary Branch) tend to apply to teacher training. Both of these subjects require the highest GSC scores.

One final point about gender and higher education is that some male students deliberately defer certain subjects in order to stay enrolled longer. The reason for this is that military service in Syria is obligatory for males aged 18 and above, but being enrolled in a tertiary course allows a student to delay military service until finishing his studies.

4.5.2 Admission Requirements

4.5.2.1 Undergraduate Admission Requirements

By law, anyone who holds a GSC is entitled to access higher education, admission into higher education is highly competitive, as the institution to which a student is admitted is dependent on the scores that student receives on their national exam (WES, 2016).

It is important to note that grades from previous years at secondary school are not considered during the admissions process (WES, 2016). Instead, the University Admissions Committee makes decisions about how students will be placed, basing their decisions on examination results and student preferences (ibid.).

The national exam scores required for admission into tertiary education vary each year. Admission to the faculties of medicine, dentistry, architecture and natural sciences requires high scores on the final exam for the GSC in the science cluster, illustrated with the following example: Only students who have achieved at least 95% at the GSC are allowed to apply for medical studies. The programme starts with a preparatory year. After that year, 50% of the GSC and 50% of the results within the preparatory year are added up. For example, a student who achieved 98% in the GSC and 90% in the preparatory year will end up with $(98\% + 90\%)/2 = 94\%$. This number determines the medical specialization a student is able to take. In order to study medicine a combined share of 97% is required, for dentists the threshold is 96%, and for pharmacy it is 95%. These latter three thresholds change from year to year (though they are always high), depending on the number of students applying for medical studies.

Some other faculties set additional requirements, such as having certain scores in a specialised subject (e.g. for studying English literature, it is necessary to score above an overall threshold GSC score (e.g. at least 70%) on the one hand and a certain threshold score in English Language (e.g. 80%). However, in some cases, if a student performs very highly in the specific subject (e.g. 90% in English), they will still be admitted, even if they have a low overall GSC score (e.g. 40%). Fine arts and architecture colleges and universities also require specific skills.

Mofadala is a list describing which minimum marks are required for enrolment in the various disciplines at the post-secondary level (Table 8). Usually about one month after the announcement of the results of the exams in general and vocational secondary education, the first *Mofadala* is published by newspapers and on the Internet. According to required marks and their personal interests, students can apply for the first *Mofadala* by listing several potential fields, in order of preference. About four weeks after the first *Mofadala*, the second *Mofadala* is published. The required marks in the second *Mofadala* are always higher than in the first one and reflect the capacities of the universities and the needs of the government. The second *Mofadala* determines which field a student will be allowed to study, and, as such can be seen as a crucial point in students' lives. In principle, this is the first in the ordered list of the desired fields where the student achieves the required marks. The *Mofadala* webpage (<http://www.mof.sy/>) provides access to important information for students, such as admission conditions and required scores for the first and second *Mofadala*, and students can check online which subject(s) they will be allowed to study.

There are also *Parallel Mofadala* and *Open Mofadala* for those students whose scores do not meet the general *Mofadala* requirements and thus have been unable to enrol in their

desired fields. These will allow students to participate in parallel and open learning opportunities, as described below.

Table 8: Second Mofadala's results for the science track (the minimum required degrees to enrol at Syrian universities and institutes) for the academic year 2015/16

College/Department	City	Minimum score	Subjects (see note)		
			Mathematics out of 600	Foreign language out of 300	Physics out of 400
		Total score for all subjects out of 2700			
Informatics/engineering	Damascus	2240	524	293	391
Informatics/engineering	Aleppo	2227	523	270	400
Informatics/engineering	Latakia	2240	509	285	388
Informatics/engineering	Homs	2240	209	288	392
		Total score for all subjects out of 2700	Mathematics out of 600	Physics out of 400	Foreign language out of 300
Civil engineering	Damascus	2212	560	368	277
Civil engineering	Aleppo	2210	552	393	276
Civil water	Aleppo	2133	430	379	291
Topographic engineering	Aleppo	2150	539	352	276
Structural engineering	Latakia	2256	548	390	289
Engineering, management and construction	Latakia	2240	522	369	298
Geotechnical engineering	Latakia	2196	502	379	289
Transportation engineering	Latakia	2186	522	375	290
Water engineering and Irrigation	Latakia	2165	441	387	285
Environmental engineering	Latakia	2165	484	372	291
Engineering topographic	Latakia	2194	525	378	280
Civil engineering	Homs	2219	563	396	296
		Total score for all subjects out of 2700	Arabic language out of 400	English language out of 300	
Arabic language	Damascus	1526	350		
English language	Damascus	2125		288	
		Total score for all subjects out of 2077	Religious education out of 200	Arabic language out of 400	
Sharia*	Damascus	1343	180	245	

Source: <http://mof.sy/> Note: The subjects should be taken into consideration separately in case the minimum degree is equal amongst the students * *Sharia discipline: The Islamic education is summed and calculated with total student's degrees and it is considered as specialization's subject.*

4.5.2.2 Postgraduate Admission Requirements

Admission to a Master's program requires the following terms: (1) Bachelor degree with a score of at least (good) average from a Syrian universities. Equivalent degrees from colleges or high institutes have to be recognized by the university's council. (2) Success in foreign language test (conditions are defined by the Higher Education Council).⁸ The Higher Education Council defines the Master's *Mofadala* conditions. The number of accepted applicants must not exceed three times the annual teaching staff for every specialisation, in recognition of the importance of student-teacher ratios to the quality of education.

Admission to Doctoral programmes requires the following conditions to be met: (1) Master's degree with a score of at least (good) average from a Syrian university. An equivalent degree from colleges or higher institutes have to be recognized from the college or department council according to the rules specified by its higher education council.(2) Success in foreign language test (conditions are defined by the Higher Education Council).⁹

4.5.3 Intermediate Institutes

In Syria, the common name for post-secondary institutes is "intermediate institutes". In general, there are two types of institutes, so-called "obligated institutes" where students are granted jobs in the public sector after finishing, and so-called "non-obligated institutes", where the government does not have to grant jobs afterwards.

This education lasts at least two years. Student should be below age 23 and have to attend at least 90% of the practical and theoretical lessons. The assessment system is shown in Table 9. There are two types of vocational post-secondary education, which are completed with either the "Licensed Assistant Certificate" or the "Technical Diploma Certificate".

Table 9: Intermediate Institute Assessment System

Marks	Definition
0 - 60%	Fail
60 - 65%	Pass
65 - 75%	Good
75 - 85%	Very good
85 - 100%	Excellent

Source:<http://www.mohe.gov.sy/SD08/msf/Rules%20of%20Procedure%20of%20Institutes2008.pdf>. (page 11).

⁸ Translated and rephrased from the MoHE webpage:
<http://www.mohe.gov.sy/SD08/msf/HighStudiesSystem.pdf>

⁹ Translated and rephrased from the MoHE webpage:
<http://www.mohe.gov.sy/SD08/msf/HighStudiesSystem.pdf>

4.5.4 Universities

The list below gives the names of the seven public and 20 private universities operating in Syria:¹⁰

Public institutions

- Damascus University (جامعة دمشق)
- Aleppo University (جامعة حلب)
- Tishreen University (جامعة تشرين)
- Al-Baath University (جامعة البعث)
- Al-Furat University (جامعة الفرات)
- Syrian Virtual University (الجامعة الافتراضية السورية)
- Hama University (جامعة حماه)

Private institutions

- AL-Kalamoon University (جامعة القلمون الخاصة)
- Cordoba Private University (جامعة قرطبة الخاصة)
- AL-Ittihad Private University (جامعة الإتحاد الخاصة)
- Arab International University (الجامعة العربية الدولية الخاصة)
- International University of Science and Technology (الجامعة الدولية الخاصة للعلوم والتكنولوجيا)
- Syrian Private University (الجامعة السورية الخاصة)
- AL-Wadi International University (جامعة الوادي الدولية الخاصة)
- Al-Andalus University of Medical Sciences (جامعة الأندلس الخاصة للعلوم الطبية)
- Al-Jazeera University (جامعة الجزيرة الخاصة)
- Al-Hawash Private University (جامعة الحواش الخاصة)
- Ebla Private University (جامعة إيبلا الخاصة)
- Al-Shahbaa Private University (جامعة الشهباء الخاصة)
- Yarmouk Private University (جامعة اليرموك الخاصة)
- Arab University of Sciences and Technology (الجامعة العربية الخاصة للعلوم والتكنولوجيا)
- Arab Academy of Sciences and Technology and Maritime Transport (الأكاديمية العربية للعلوم والتكنولوجيا والنقل البحري)
- Al-Wataniya Private University (الجامعة الوطنية الخاصة)
- Al Sham institution of Sahriaa sciences, Arabic language and Isalmis studies & researches. (معهد الشام العالي للعلوم الشرعية واللغة العربية والدراسات والبحوث الإسلامية).
- Al-Rasheed International University of Sciences & Technology (جامعة الرشيد الدولية الخاصة للعلوم والتكنولوجيا)
- Qasyoun University of Sciences and Technology (جامعة قاسيون الخاصة للعلوم والتكنولوجيا).
- Al-Sham Private University (جامعة الشام الخاصة)

¹⁰ Source: <http://mohe.gov.sy/mohe/index.php?node=5510&cat=1712&>

As previously mentioned, whether public or private, these institutions are overseen by the MoHE.

A Bachelor degree is obtained either after four years (studies in literature, economics, and scientific specializations like mathematics and biology disciplines), five years (engineering, pharmacy, dentistry and veterinary studies), or six years (medicine). Languages of instruction are Arabic and English (and sometimes French). The governmental universities are free of charge, but there are symbolic annual fees (as mentioned earlier). There are no age limitations on enrolment. Table 10 shows the assessment system in universities. Due to the large number of students, in some universities (such as Damascus or Aleppo) no practical courses, seminars or graduation projects are provided.

Table 10: Undergraduate Studies (Assessment System)

Marks	Definition
0 - 49%	Fail
50 - 59%	Pass
60 - 69%	Good
70 - 79%	Very good
80 - 89%	Excellent
90 - 100%	Honours

Source: Personal communication with an employee with Damascus University.

Master's programmes typically require two years to complete, and are either academic or professional in nature (WES, 2016). In order to obtain a Master's degree, students have to accomplish the following: (1) Success in all exams within two years. The timeframe may be extended by one year with the approval of the college council. (2) After passing all exams, research has to be conducted in a topic determined by the department/college's council and completed within one year. The timeframe may be extended up to three years. (3) The research findings have to be presented in public as part of the master's thesis in front of an evaluation committee. A minimum GPA of 60 percent is required to graduate. Dentist and pharmacy Master's studies have to pass additional exams for skills and knowledge in the relevant specializations before submitting the Master's thesis.

Doctoral programmes require an additional three years of study, after the completion of a Master's degree (WES, 2016). Doctoral students are expected to write a dissertation, which is evaluated by an external panel (including at least one academic based overseas). Further, doctoral candidates must obtain a minimum GPA of 60 percent in order to graduate (ibid.).

4.5.4.1 Higher Institutes

In Syria, higher institutes are public institutions supervised by the MoHE (and, in some cases, Damascus University) that are considered to be 'centres of excellence' by the Ministry (WES, 2016). They offer a range of degrees from diploma studies and Master's programmes in the field of business, biotechnology, population studies, etc. to Doctoral degrees. Generally, entry requirements are higher than for public universities (ibid.).

Below is a list of higher institutes in Syria in 2016:

Higher institutes offering Post-graduate Diploma

- Higher Institute of Business Administration HIBA (المعهد العالي لإدارة الأعمال)
- The National Institute of Public Administration INA (المعهد الوطني للإدارة العامة)
- Higher Institute of Demographic Studies & Researches HIDSR (المعهد العالي للدراسات والبحوث السكانية)
- Higher Institute of Water Management HIWM (المعهد العالي لإدارة المياه).

Higher institutes associated with Damascus University

- Higher Institute of Lasers Researches and their Applications (المعهد العالي لبحوث الليزر (وتطبيقاته)
- Higher Institute of Earthquake Studies and their Researches (المعهد العالي للبحوث والدراسات الزلزالية)
- Higher Institute of Administrative Development (المعهد العالي للتنمية الإدارية)
- Higher Institute of Translation and Interpretation (المعهد العالي للترجمة والتفسير الفورية)
- Higher Language Institute (المعهد العالي للغات)

Higher institutes associated with Aleppo University

- Higher Institute of the Arabic History Sciences (معهد التراث العلمي العربي)
- Higher Institute of Languages (المعهد العالي للغات)

Higher institutes associated with Tishreen University

- Higher Institute of Sea Researches (المعهد العالي للبحوث البحرية)
- Higher Institute of Environmental Researches (المعهد العالي لبحوث البيئة)
- Higher Institute of Languages (المعهد العالي للغات)

Higher institute associated with Al-Baath University

- Higher Institute of Languages Teaching (المعهد العالي لتعليم اللغات)

4.5.4.2 Virtual, Open and Parallel Learning at University

The Syrian higher education sector allows for some flexible learning opportunities, including virtual learning for students wishing to study completely online, and open and

parallel learning, for students who have not achieved the required results during the official *Mofadala*.

The MoHE opened the SVU as an online university in 2002. It offers electronic teaching by using the most recent means including the virtual classes, an electronic library and online services to students. This university is entirely online. Initially, the virtual university stems from an international program providing courses from Arabic, American and European universities. The SVU has signed agreements with recognized international universities and the MoHE in Syria. Courses are taught in Arabic or other languages such as English (<https://www.svuonline.org>).

Students belonging to the Open Learning type (*Al Taleem Maftooh*) are students registered at certain faculties who use faculty resources for learning during the weekends. They are not considered in the same way as traditional students in terms of fees, modules studied, timetable and programs. In total, fees for open learning may exceed 50,000 SYP annually.

Parallel students (*Al Taleem Moazi*) are students who did not achieve the required scores in the Baccalaureate (but only slightly less) and have financial resources to pay much higher fees in order to gain access to governmental universities. For example: Students can study medicine as parallel learning in public universities if they achieved 96% in the GSE exam instead of the required 97% of GS. Parallel learning has special admission procedures, called Parallel Learning Admission (*Mofadala*) as described above. In total, the fees may exceed 150,000 SYP annually.

4.6 Religious Education

Religious education in Syria is compulsory until the end of the upper secondary education. Islamic education is intended for Muslim students, Christian education for Christian students. The religious curriculum is supervised and observed by the MoE in coordination with the Ministry of Religious Endowments. In addition to regular schools for basic and secondary education (which offer religious education as part of their curriculum), there are also Sharia schools, Christian schools, and a very small number of Jewish schools.

4.6.1 Islamic education (Sharia schools)¹¹

Sharia Islamic schools represent the traditional way to teach theology and are one of the most prominent areas of civil non-profit education. Sharia schools start from the second cycle of basic education (Grade 5) until the end of secondary (Grade 12), forming a separate branch of secondary education in Syria (alongside the general and vocational secondary

¹¹ This information is taken from http://awqaf-damas.com/?page=category&category_id=31 and <http://mow.gov.sy/>

education). The Ministry of Religious Endowments (MoRE) supervises the Sharia schools and defines their curriculum and teaching plan.

In 2008, the MoRE developed a unified curriculum for all Sharia schools, consisting of seven subjects:

1. *Shafi'i Jurisprudence*: The Shafi'i (Al Feqh Al Shafi'i) is a doctrine of one of the four schools of Islamic law in Islam. It was founded by the Arab scholar Al-Shafi'i in the early 9th century. The other three schools of Sunni jurisprudence are Hanafi, Maliki and Hanbali. This doctrine is widespread among the Levant's Muslim Sunni inhabitants.
2. *Hadith*: A report of the sayings of Muhammad or his companions, together with the tradition of its chain of transmission.
3. *Islamic Faith*: (Al Aqida) the religious faith of Muslims, based on the words and religious system founded by the prophet Muhammad and taught by the Koran, the basic principle of which is absolute submission to a unique and personal God, Allah.
4. *Prophet's biography*: Detailed story of the life and history of Prophet Muhammad, including his birth and early life, the events and the battles in Makkah and Madinah, and his final years.
5. *Interpretation*: (Al Tafsir) the Koran commentary and explication (Tafsir), aimed at explaining the "meanings of the Koranic verses, clarifying their import and finding out their significance".
6. *Recitation*: the rule Koran reading (Tajwid) The proper recitation of the Koran is the subject of a separate discipline named Tajwid which determines in detail how the Koran should be recited, how each individual syllable is to be pronounced, the need to pay attention to the places where there should be a pause, where the pronunciation should be long or short, where letters should be sounded together and where they should be kept separate.
7. *Public speaking*: (Elocution) the study of how to speak clearly and in a way that is effective and socially acceptable using the proper Quraa and Hadith scripts.

In addition to the seven Sharia subjects, these schools also teach all the subjects of the general secondary education literary branch, and therefore, their certificate has been considered equivalent to the general literary one since 1971. Through this equivalency, students are able to continue their studies in various departments and specialties in the government-funded universities.

While these Sharia schools receive ministerial funding, personal donations are used to meet a significant part of their needs, which means that they tend to be viewed more as local private schools. Most of these donations come from the Zakat fund, which the MoE established to "support and fund Sharia education." The fund works to collect donations from citizens to build new schools and to provide money for operating existing ones.

There are also some Sharia schools which are wholly private or community-run. In theory, they are related to the MoRE, but civil society assumes all responsibilities for management and spending, and the curriculum is not fixed, but entirely at the teachers' discretion. Further, the certificate awarded by these Sharia schools is not recognised by the formal education system in Syria. As a result, some of their graduates are forced to complete their university studies outside of the country.

There were about 220 schools in Syria in 2013, according to the Ministry of Religious Endowments.

After the government allowed the private sector to invest in the education process in 2001, a few private religious tertiary education institutes were opened. Most of them are departments of other universities outside Syria, such as Al Azhar University in Egypt. There is also the Al Sham Institution of Sharia Sciences, Arabic Language and Islamic Studies & Research, which also has a faculty to teach Arabic as a second language.

4.6.2 Christian schools

As previously mentioned, Christians make up approximately 10 percent of Syria's population.

While there is Christian education dedicated for Christian pupils, there are no official Christian schools supervised by the MoRE or the MoE that are comparable with the Sharia Schools. However, there are some, but not many, private Christian schools in many governorates. The type of Christian education curriculum is general and comprehensive, containing religious texts of the Bible, the life of Jesus, biblical figures and moral values.

4.6.3 Jewish Schools

The Jewish population has been very small since the creation of Israel, due to the massive emigration of the Jewish population to Israel. There are very few Jewish children in the school system, therefore textbooks of Judaism are not produced by the MoE. As a result, Jewish pupils are exempt from the national religious education exams.

4.7 Education for Palestinian Refugees¹²

There are currently an estimated 560,000 Palestinian refugees from Syria. For the most part, education for these refugees is managed by the United Nations Relief and Works Agency

¹² Much of this information has been retrieved from <http://www.unrwa.org/where-we-work/syria> and <http://www.unrwa.org/syria-crisis>

(UNRWA), who is also operational in Lebanon, Jordan, the West Bank, and Gaza. Prior to the conflict, UNRWA provided basic education through 118 schools located in refugee camps and gatherings, all of which were running on double shifts to provide around 67,300 students with primary and secondary education, following the Syrian curriculum. However, after years of conflict in Syria, as of March 2014, only 42 of those schools are operational, and some of those are running on triple shifts. The MoE in Syria is allowing UNRW to use 43 Syrian schools in the afternoons to educate Palestinian refugees. Now, only 44,000 Syrian children are enrolled in school (70 percent of the pre-conflict total). UNRWA also runs more than 24 women's programmes and community rehabilitation centres, as well as the Damascus Training Centre, a technical vocational education and training programme.

In terms of assessment and certification, wherever possible, UNRWA students take the national exams conducted by the Syrian government, to ensure that their qualifications are recognised by the host country. Further, the certificates provided at Damascus Training Centre are recognised by the Syrian state.

As education has been a cornerstone of UNRWA's programming in all areas of operation since UNRWA's inception, UNRWA schools have been able to maintain a relatively high standard, particularly when the challenging conditions in which they exist are factored in (Shah, 2015; World Bank, 2014).

5. Syrian Education in a Time of Civil War

As previously mentioned, the economic and social collapse brought on by years of conflict has undone years of educational achievement in Syria, with over 2 million Syrian children out of school (inside and outside Syria), still others at risk of dropping out, and one fifth of all Syrian teaching staff and school counsellors lost (UNICEF MENA, 2015). In 2012, only 57 percent of students continued on to secondary school, down from 98 percent the previous year (WES, 2016). Further, one out of every five schools in Syria has been damaged, destroyed, or repurposed, often as army barracks (UNICEF MENA, 2015). The devastation caused to the education system by the conflict will have a ripple effect on Syria's economy and prosperity as a whole. In fact, according to Bouchane (2016), UNICEF has claimed that Syrian children missing out on education as a result of the conflict will lead to an estimated 10.7 billion USD loss of human capital, which is more than 17 percent of Syria's GDP in 2010.

The Syrian government has made some attempts to respond to the crisis. In collaboration with UNICEF and UNRWA, the Syrian MoE reviewed materials for self-learning originally developed by UNRWA for Palestinian refugee children and revised them in line with the official Syrian curriculum (UNICEF, 2015). These materials are therefore officially recognised by the MoE for use in home-based or community learning centres, and are seen as an important way to provide education in crisis.

Further, by presidential decree (in effect since March 2011), students in higher education are able to defer up to eight of their subjects to the following year, and there is a third exam semester with supplementary exams for those who have failed more than eight subjects. These changes have been made in order to help students deal with unstable circumstances, particularly those who have to move/travel within the country.

5.1 Education for Syrians inside Syria

The following section briefly explores the state of education in four different categories: government-controlled regions, opposition-controlled regions, Kurdish-controlled regions and regions controlled by the so-called Islamic State.

5.1.1 Government-Controlled Regions

Syrian education in government-controlled regions is more stable than in the opposition's region because, broadly speaking, these regions are safer. However, the relative stability attracts students, so many schools in these regions have overcrowded classrooms, especially in basic education. The majority of these schools have started running double shifts to accommodate increasing numbers of students. Teachers at these schools are mostly recruited through public education institutions and their classes follow a fixed timetable, with some additional courses available to support students in achieving higher marks on their exams. For the most part, teachers and students who are enrolled go to school on a regular basis, except when there have been rising tensions, or an incident such as a random bombardment. However, in areas where there has been a large influx of internally displaced people (IDPs), many children are out of school (particularly displaced children) for a variety of reasons, including a lack of available learning spaces, a lack of official documentation allowing for children to enrol, etc. (UNICEF, 2015).

Tertiary education exists exclusively in government-controlled areas.

5.1.2 Opposition-Controlled Regions

Education in opposition-controlled regions is characterised by unstable enrolment and intermittent education semesters due to the armed struggle and continuing shelling. Schools are still supervised by the Syrian government in the majority of the opposition-controlled areas, and receive government funding, including payments for teachers and school resources, but often this funding is insufficient.

The opposition and its own MoE run some schools in these regions, but these often lack qualified staff, despite low student-teacher ratios (classes have a maximum of ten students).

In the areas controlled by moderate groups, education services often continue, using the official Syrian curriculum, but with certain subjects removed, such as national education and history, because they are seen as reflecting the views of the present government. In some of these areas, a curriculum revised by the Syrian Opposition Coalition based in Turkey is in use. The Syrian Opposition Coalition conducted Grades 9 and 12 examinations during the academic years 2012/2013 and 2013/2014 in these areas and provided certificates for students who successfully completed their examination. However, there is no official recognition of any certificate issued by an opposition group from the government side, making educational progression difficult for the children concerned.

There are some local organisations and NGOs trying to improve the educational situation by opening institutes and organising some courses and centres for children who have been affected by the war. But the quality of education is often poor, such that even the people who are in charge of these organisation prefer to register and enrol their children in schools that are supervised by the government.

The national exams in Syria are conducted exclusively in the government-controlled areas. Students from the opposition areas have to enter these areas to sit their exams.

5.1.3 Kurdish-Controlled Regions

The educational system in the Kurdish regions is similar to the government-controlled areas in terms of safety, but in Kobani or Ayn al-Arab (a Kurds area located near the Turkish borders), the majority of its educational institutions and buildings were destroyed due to intensive armed battles with Islamic State (ISIL) in 2015. The Syrian government, in collaboration with international organisations, continues to provide schools in these regions with maintenance support, textbooks and other resources, and guarantees the salaries in the educational sector.

The curriculum in these regions is Kurdish and is taught in Kurdish language, Arabic and Syriac (Aramaic).¹³ One feature of the Kurdish curriculum is that the name of the subject Political Education has been changed to Democratic Nation, and that it does not teach Arab history. Some parents oppose the Kurdish curriculum, since it is not officially recognised by the government.

5.1.4 Islamic State: Islamic State of Iraq and Levant (ISIS/ ISIL)

The previously existing education system has broken down in the areas controlled by ISIL (Islamic State of Iraq and Levant). The organisation of indoctrination of children by ISIL

¹³ Syriac (Aramaic) is the language of the Christian Syriac minorities in Syria and Iraq that belongs to the family of Semitic languages. Syriac (Aramaic) was the language of Jesus Christ.

does not represent an 'education system' in the sense understood in this report. Unfortunately, no information was officially available. For example, we do neither know the ISIL "curriculum" that is taught there, nor if children (or boys) are still going to a school building every day or if schools are closed entirely.

5.2 Education for Syrians outside of Syria

As previously mentioned, the protracted Syrian crisis has precipitated mass displacement, both within and across Syria's borders, which has had (and continues to have) an enormous impact on wellbeing, prosperity, and stability in the region as a whole, for displaced persons and their host communities alike. Table 11, taken from UNICEF (2015) shows the number of school-age Syrian children in and out of school, both inside and outside of Syria, in neighbouring countries:

Table 11: Syrian children in and out of school in Syria and neighbouring countries, as of December 2014

Country	Number of registered school-age children (5–17 years)			Number of projected school-age children ¹² (5–17 years) at end 2014	Number of school-age children in formal education December 2014 ¹³	Number of school-age children in non-formal education December 2014 ¹⁴	Number of school-age children out of school		
	August 2013 ⁹	June 2014 ¹⁰	December 2014 ¹¹				August 2013	June 2014	December 2014
Inside Syria				5.7 million¹⁵ (2013/2014) 6.4 million (2012/2013)	3.7 million¹⁶ (3.5 million – 2012/2013) (5.6 million – 2011/2012) (5.5 million – 2010/2011)	2 million, or 35% (2013/2014) ¹⁷ 2.9 million, or 45% (2012/2013)			
Outside Syria (refugees)									
Turkey	110,000	274,722	531,071	350,000	187,000 (107,714 – June 2014) (33,400 – August 2013)	26,140 (7,285 – June 2014) (no data – August 2013)	76,600 (70%)	159,723 (58%)	317,931 (60%)
Lebanon	194,014	352,094	383,898	510,000	8,043 (80,771 – June 2014) (34,547 – August 2013)	109,503 (71,634 – June 2014) (24,833 – August 13)	134,654 (69%)	199,689 (57%)	266,352 (69%)
Jordan	181,000	206,079	213,432	238,000	127,857 (120,555 – June 2014) (44,098 – August 2013)	54,301 (18,759 – June 2014) (3,625 – August 2013)	133,277 (74%)	66,765 (32%)	31,274 (15%)
Iraq	38,350	58,831	67,234	65,000	35,146 (20,916 – June 2014) (10,415 – August 2013)	6,166 (no data – June 2014) (no data – August 2013)	27,935 (73%)	37,915 (64%)	25,922 (39%)
Egypt	33,700	41,458	42,033	42,000	41,240 (28,943 – June 2014) (18,700 – August 2013)	No NFE programming	15,000 (45%)	12,515 (30%)	793 (2%)
Total refugees	557,064	933,184	1,237,668	1,205,000	399,286 (358,899 – June 2014) (141,140 – August 2013)	196,110 (97,678 – June 2014) (28,458 – August 2013)	387,466 (70%)	476,607 (51%)	642,272 (52%)

⁹ School-age population calculated using UNHCR registration as of August 2013.

¹⁰ School-age population calculated using UNHCR registration as of June 2014.

¹¹ School-age population calculated using UNHCR registration as of December 2014.

¹² Projection of school-age children is calculated using UNHCR registration of children aged 5-11 years and 12-17 years and total projected refugee population from Regional Response Plan (RRP6) Mid-Year Review. The projection for Turkey became an underestimate because of the siege of Kobani, which led to a huge influx of Syrian refugees during the end of 2014. The projection for Lebanon was greater than the December figure because the Lebanese Government has restricted the refugee registration.

¹³ August 2013 data: Data from UNICEF SitRep, 8 August 2013; June 2014 data and December 2014 data: Data from Regional Education RRP6 Monthly Update for Turkey, Lebanon, Jordan, Iraq and Egypt. The finalized school registration figure from the MOE in Lebanon is not yet available. The figure for Lebanon covers children aged 6-15. Figures for other countries cover children aged 5-17.

¹⁴ August 2013 data: Data from UNICEF SitRep, 8 August 2013; June 2014 data and December 2014 data: Data from Regional Education RRP6 Monthly Update for Turkey, Lebanon, Jordan, Iraq and Egypt. Figure for Lebanon covers children aged 3-18. Figures for other countries cover children aged 5-17.

¹⁵ Average of population estimations using data from UNPD, Syria 2011 Statistical Year Book, Syria 2004 Census and Population projection of the United States Census Bureau. This estimate is for the beginning of 2014. Registered refugee children population in October 2013 is subtracted from the total population.

¹⁶ 2013/2014 data: Data refers to students in pre-school, basic, general secondary and vocational secondary in 12 governorates. Data from Raqqa and Deir ez-Zour (the two other governorates of the 14 in Syria) was not available. Earlier data (2010-2012): Data refers to students in pre-school, basic, general secondary and vocational secondary in 13 governorates. Data from Raqqa was not available. All data is from education ministries' EMIS.

¹⁷ The figure is calculated using data from education ministries' EMIS, UNHCR, UNPD, Syria 2011 Statistical Year Book, Syria 2004 Census and Population projection of the U.S. Census Bureau.

Source: UNICEF (2015, p.2)

Despite the fact that most of the five host countries in question have not signed the 1951 Refugee Convention, for the most part, Syrian children have been allowed to access host country public schools (UNICEF, 2015). As can be seen from the table, however, this does not mean that all Syrian refugee children have been able to access schools. In fact, over half of Syrian refugees in Syria's neighbouring countries are out of school. It should be noted that these governments have made huge efforts to support the learning of Syrian refugees. In fact, Culbertson and Constant (2015) have commented on the "remarkable generosity" towards Syrians demonstrated by the governments and citizens of Turkey, Lebanon, and Jordan, especially given the fact that their own education systems are currently overstretched. The pressure on existing systems, the introduction of double shifts, the strain on teaching personnel and infrastructure, and dwindling resources have meant that not only is the education of Syrian children under threat, but the education of all children in the region.

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Appendix

Figure A1: Structure of the education in Syria

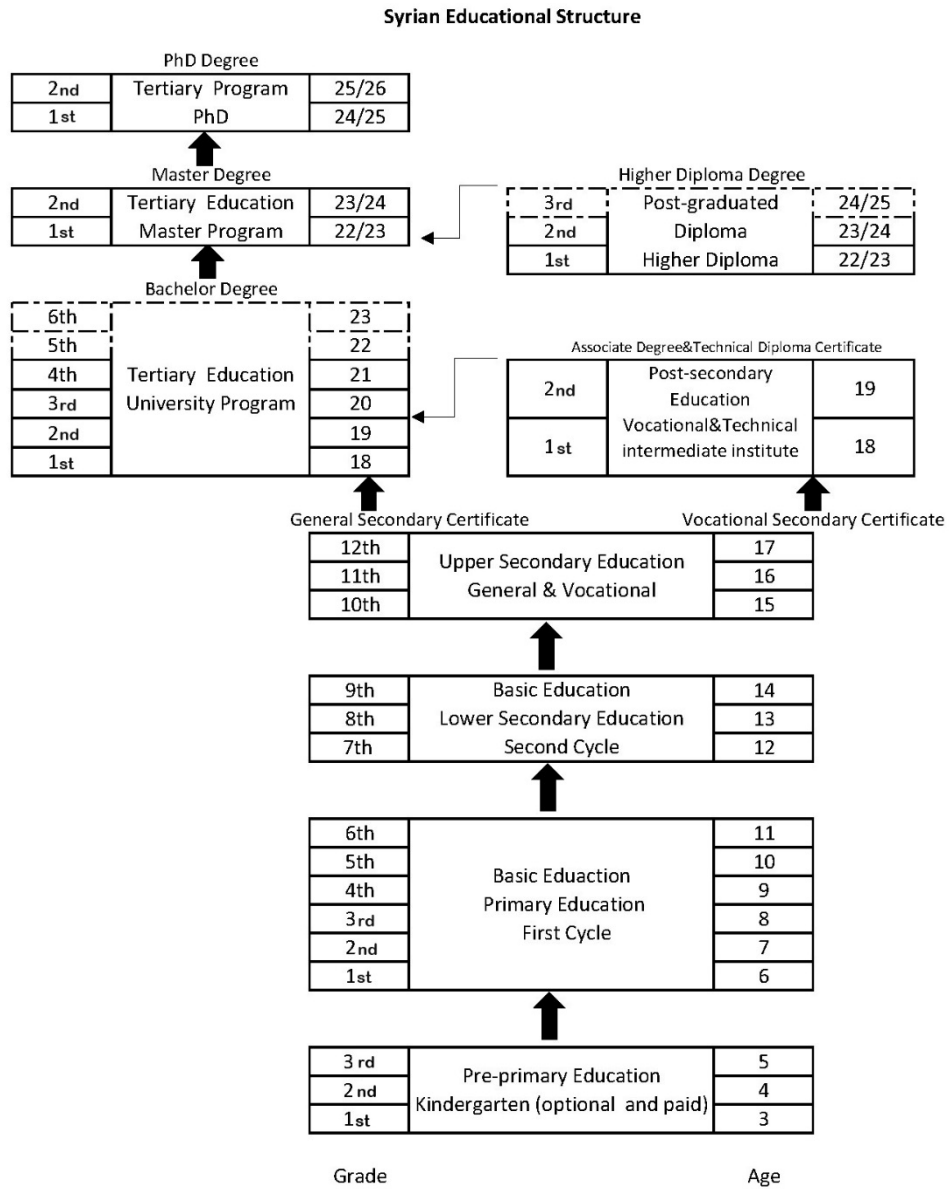


Table A1: Total number of students of the tertiary education in the academic year 2013/14 in different universities

Damascus University

Total	Female	Male	Tertiary level	
162,969	91,679	71,290	Total education	Bachelor degree
34,019	17,412	16,607	Parallel education	
13,975	5,959	8,016	Total education	Diploma, higher institutes, master and PhD
1,706	573	1,133	Parallel education	
72,863	34,777	38,086	Open learning	
13,354	5,535	7,819	Total education	Post-secondary non-tertiary education
3,500	1,298	2,202	Parallel education	
720	720	0	Nursery school	
263,881	138,670	125,211	Total	

Aleppo University

Total	Female	Male	Tertiary level	
85,457	40,037	45,420	Total education	Bachelor degree
19,411	7,737	11,674	Parallel education	
2,927	1,122	1,805	Total education	Diploma, higher institutes, master and PhD
373	115	258	Parallel education	
60,095	22,139	37,956	Open learning	
5,733	2,175	3,558	Total education	Post-secondary non-tertiary education
952	300	652	Parallel education	
142	142	0	Nursery school	
154,354	65,615	88,739	Total	

Tishreen University

Total	Female	Male	Tertiary level	
82,379	46,780	35,599	Total education	Bachelor degree
17,794	8,834	8,960	Parallel education	
3,037	1,536	1,501	Total education	Diploma, higher institutes, master and PhD
450	165	285	Parallel education	
25,766	12,614	13,152	Open learning	
6,612	2,760	3,852	Total education	Post-secondary non-tertiary education
1,322	484	838	Parallel education	
117,794	63,690	54,104	Total	

Al Baath University

Total	Female	Male	Tertiary level	
72,052	39,278	32,774	Total education	Bachelor degree
14,575	6,828	7,747	Parallel education	
2,924	1,301	1,623	Total education	Diploma, higher institutes, master and PhD
365	88	277	Parallel education	
31,498	15,207	16,291	Open learning	
2,289	1,004	1,285	Total education	Post-secondary non-tertiary education
429	149	280	Parallel education	
108,763	56,790	51,973	Total	

Al Furat University

Total	Female	Male	Tertiary level	
77,330	38,893	38,437	Total education	Bachelor degree
15,355	6,900	8,455	Parallel education	
590	222	368	Total education	Diploma, higher institutes, master and PhD
34	11	23	Parallel education	
27,847	10,774	17,073	Open learning	
4,286	1,194	3,092	Total education	Post-secondary non-tertiary education
485	193	292	Parallel education	
110,053	51,083	58,970	Total	

Source: <http://mohe.gov.sy/mohe/index.php?node=555&cat=3273&>.

Table A2: Number of Master's and Doctoral students in public universities from 2010 to 2014

			Damascus University	Tishreen University	AL Baath University	Aleppo University
Masters	2010/11	Total	1,173	1,545	1,650	2,622
		Ongoing				
		Completed				
	2011/12	Total	1,182	2,017	1,252	2,948
		Ongoing				
		Completed				
	2012/13	Total	1,127	3,027	1,827	1,987
		Ongoing				
		Completed				
2013/14	Total	843	2,371	1,833	2,943	
	Ongoing	850	4,614	not available	710	
	Completed	2,876	2,166	not available	341	
Doctoral	2010/11	Total	382	58	82	240
		Ongoing	372	57	25	114
		Completed	1,048	17	22	68
	2011/12	Total	293	66	129	211
		Ongoing	281	42	79	95
		Completed	1,053	16	14	85
	2012/13	Total	136	81	165	173
		Ongoing	131	63	46	107
		Completed	966	25	18	70
	2013/14	Total	171	105	192	376
		Ongoing	169	75	51	74
		Completed	not available	not available	not available	not available

Source: http://www.mohe.gov.sy/SD08/msf/1434961379_StatisticsResearch2012-2014.pdf

Table A3: Scientific publications in the governmental universities from 2010 to 2014

	Damascus University	Tishreen University	AL Baath University	Aleppo University
2010	331	310	648	1,130
2011	423	696	590	1,173
2012	469	1134	229	1,029
2013	544	979	486	997
2014	394	751	812	1,003

Source: http://www.mohe.gov.sy/SD08/msf/1434961379_StatisticsResearsch2012-2014.pdf

The publications include: scientific article, research paper, technical report, general scientific publication, scientific reference, academic book, topical subject and scientific prizes

Table A4: Research projects in the governmental universities from 2010 to 2014

	Damascus University	Tishreen University	AL Baath University	Aleppo University
2010	184	30	92	157
2011	111	20	72	179
2012	22	21	41	142
2013	92	13	29	72
2014	69	35	86	140

Source: http://www.mohe.gov.sy/SD08/msf/1434961379_StatisticsResearsch2012-2014.pdf

Table A5: Lists of Master's programmes in Damascus University for the academic year of 2014

Faculty	Master's Programmes
Faculty of Arts and Humanities	
Arabic language	Literary studies Linguistic studies Criticism and rhetoric
Department of French Language and Literature	Literary studies Linguistic studies
Department of English language and literature	Literary studies Linguistic studies
Department of Geography	Physical geography Economic geography Geographical regional Human geography Geography and geographic information system
Department of History	History of the ancient near east Modern and contemporary history The History of the Arabs and Islam
Department of Sociology	Sociology
Department of Philosophy	Standard of sciences History of philosophy
Department of Libraries and Information	Information storage and retrieval systems
Faculty of Archaeology	Traces of the ancient near east

Faculty	Master's Programmes
Faculty of Economics	
Department of Accounting	Accounting Audit
Department of Business Administration	Business management Marketing
Department of Economics	The financial and monetary economics Economy
Department of Practical Statistics	Quantitative methods
Department of Banks and Insurance	Financial markets Banking and finance
Faculty of Media	Media
Faculty of Education	
Department of Education Foundations	Foundations of education
Department of Comparative Education	Comparative education and educational management
Department of Curriculum and Teaching Methods	Teaching techniques Curricula and teaching methods
Department of Special Education	Special education
Department of Psychological Counselling	Psychological counselling Mental health of children and adolescents
Department of Psychology	Educational psychology Psychology of growth Psychology
Department of Measurement and Evaluation	Educational and psychological measurement and evaluation
Department of Child-Rearing	Kindergartens
Faculty of Agriculture	
Rural Engineering Department	Rural engineering sciences
Department of Food Sciences	Food sciences
Plant Protection Department	Plant protection sciences
Department of Agricultural Economics	Science agricultural economy
Department of Animal Production	Animal production sciences
Department of Horticulture Sciences	Horticultural sciences
Department of Field Crops	Field crops sciences
Department of Soil Sciences	Soil Sciences Biotechnology
Department of Renewable Natural Resources and Environment	Renewable natural resources and environment
College of Sharia	
Department of Quran and Sunnah Sciences	Interpretation and Quran sciences hadith sciences
Department of Islamic Jurisprudence and its Principles	Islamic jurisprudence and its principles
Department of Faiths and Religions	Faiths and religions
Department of Personal Status	Law of personal status
Faculty of Civil Engineering	

Faculty	Master's Programmes
Topographic Engineering Department	Topographic engineering
Department of Structural Engineering	Structural engineering
Department of Water Engineering	Water engineering
Department of Environmental Engineering	Environmental engineering
Department of Transportation Engineering	Transport and communication engineering
Engineering and construction Management Department of	Engineering management and construction Technology information management in construction
Department of Geotechnical Engineering	Geotechnical engineering
Faculty of Mechanical and Electrical Engineering	
Department of Electrical Power Engineering	Electrical engineering renewable energies Engineering electrical power systems
Department of Computer Engineering and Automation	Computers and networks engineering Automatic control engineering Engineering and programming of the robot
Department of Electronics and Telecommunications Engineering	Advanced telecommunications engineering Practical electronics engineering
Department of General mechanics	Solar power and renewable energies Engineering Mechanical engineering fluid Refrigeration engineering Thermal engineering
Department of Cars and Heavy Machinery Engineering	Motor mechanisms and engineering
Department of Mechanical Engineering and Textile Industries	Textile facilities management
Department of Mechanical Design Engineering	Industrial engineering Materials science and engineering Automate production engineering Design and build machines
Department of Medical Engineering	Biomedical engineering
Faculty of Architecture	
Department of Architectural Design	Architectural design
Department of Planning and Environment	Planning and environment
Department of History and Theory of Architecture	History and theory of architecture
Department of Building Science and Implementation	Construction and implementation sciences
College of Law	
Department of Private Law	Private law
Department of Public Law	Public law Administrative and financial sciences
Commercial Law Department	Commercial law
Department of the Penal Code	Penal code
Department of International Law	International law

Faculty	Master's Programmes
College of Science	
Department of Mathematics	Mathematical Analysis Algebra and Geometry Applied Mathematics
Department of Physics	Physics Radiation Protection and Security of Radioactive Sources
Department of Chemistry	Chemistry
Department of Animal Life	Science of animal life
Department of Plant life	Microbiology Environment and biodiversity of plant
Department of Geology	Applied geology Applied geophysics
Department of Statistics	Mathematical statistics
Faculty of Political Science	
Department of International Relations	International relations
Department of Economics and Public Administration	International economic relations
Political Studies Department	Political studies
Faculty of Information Technology	
Department of Software Engineering and Information Systems	Software engineering and information Systems
Department of Systems and Computer Networks	Systems and computer networks
Department of Artificial Intelligence	Artificial intelligence
Faculty of Dentistry	
Department of Pediatric Dentistry	Pediatric dentistry
Department of Orthodontics	Orthodontics
Department of Oral & Maxillofacial Surgery	Oral and maxillofacial
Department of Dental Therapeutics	Dental therapeutics
Department of Dental compensation animated	Animated teeth compensation
Department of Fixed Dental Compensation	Fixed teeth compensation
Department of the Mouth and Teeth	Tissue and pathology of the mouth and teeth
Department of Dental Tissue	Histopathology periodontal
Department of Oral Medicine	Oral medicine
Faculty of Pharmacy	
Department of Pharmaceutics and Pharmaceutical Technology	Industrial pharmacy
Department of Biochemistry and Microbiology	Microbiology and hematology ; Laboratory diagnosis Clinical biochemistry molecular biological and biotechnology
Department of Drug	Drugs
College of Fine Arts	
Department of Visual Communication	Optical communications
Department of Drilling	Drilling

Faculty	Master's Programmes
Department of Drawing and photography	Photography
Department of Interior Architecture	Interior architecture
Department of Sculpture	Sculpture
Faculty of Tourism	Economics and management tourist Cultural heritage resources management
Higher Institute of Earthquake Studies and Research	Structural engineering seismicity; seismology Geotechnical seismicity engineering
Higher Institute for Administrative Development	administrative Sciences International business management
Higher Institute of Languages	Arabic language teaching English language teaching

Source: <http://www.damascusuniversity.edu.sy/archive/2350--2013-2014>

Table A6: Syrian university ranking according to Web of Universities ranking

Ranking	World Ranking	University	Presence Rank	Impact Rank	Openness Rank	Excellence Rank
1	4152	Damascus University	7001	8823	933	3834
2	7360	Tishreen University	5691	13614	1813	4315
3	8799	Syrian Virtual University	3215	10319	8012	5484
4	8879	Al Baath University	5462	11137	2940	5484
5	10193	Institut Français du Proche-Orient Damas	8529	6659	20723	5484
6	12906	University of Kalamoon	11251	12761	13839	5484
7	13612	Wadi International University	4269	17824	1466	5484
8	13803	International University for Science & Technology	16115	14059	9619	5484
9	15152	Arab International University Damascus	12828	15220	15872	5484
10	17272	Higher Institute of Business Administration	18336	17424	13789	5484
11	17782	(3) University of Aleppo College of Pharmacy	20229	19695	20723	3834
12	18330	Syrian International Academy	18799	18294	16200	5484
13	18795	Al Hawash Private University for Pharmacy and Cosmetology	13528	19793	13949	5484
14	18889	Yarmouk Private University	15901	19518	14696	5484
15	19510	Al Jazeera University	20625	19153	17561	5484
16	19566	Syrian Private University (International Private University for Science & Technology)	15789	20493	11902	5484
17	20021	Itihad Private University	19650	19496	19173	5484

Ranking	World Ranking	University	Presence Rank	Impact Rank	Openness Rank	Excellence Rank
18	20662	Al Wataniya Private University	17474	21245	11546	5484
19	20825	Al Andalus University	23783	18423	20723	5484
20	21579	Mamoun Private University for Science & Technology	23783	19866	21858	5484
21	21697	Al Furat University	23783	20168	21858	5484
22	21965	Institut Supérieur des Sciences Appliquées et de Technologie Damascus	4770	99999	18837	4892
23	22229	Institut National of Administration	15030	22049	10113	5484
24	23155	Al Shahbaa University	22843	22049	18571	5484

Source: <http://www.webometrics.info/en/Asia/Syrian%20Arab%20Republic>

Table A7: The three highest ranking Austrian universities

Ranking	World Ranking	University	Presence Rank	Impact Rank	Openness Rank	Excellence Rank
1	101	<u>Universität Wien</u>	78	67	55	284
2	213	<u>Technische Universität Wien</u>	491	153	222	324
3	248	<u>Universität Innsbruck</u>	346	319	501	430

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